**(Joint System Research Questions)**

Does systems research add value?

Does diversification enhance resilience and nutrition?

What enabling environment is required systems research?

How do we build capacity to conduct systems research?

**Themes/Problems/Issues to be addressed by research**

1. Combating environmentally unsound practices, e.g. weed control that is environmentally sound (chemical, biological)
2. Promoting efficient resource use, e.g. improved nutrient cycling
3. Improved technology uptake, e.g. research on scaling
4. Farm enterprise diversification and expansion (e.g. adding value) to reduce hunger periods
5. Capacity of market systems to respond to farmers demands
6. Multi-output interventions to avoid unsustainable intensifications, e.g. expanding multi-purpose options/innovations for smallholders

**GP 2 new**

1. System component interactions and synergies for enhancing resilience
2. Households evolving overtime through stepwise uptake of innovations
3. Rural mechanization
4. Research on policy, market and institutional issues

**GP 3 new**

1. How to adapt to changing environments (e.g. climate, markets, policies) and management practices (e.g. new genetics, inputs)
2. Crop/livestock diversification vs dietary diversity vs improved nutrition

**Cross-cutting**:

1. Understanding incentives and barriers of adoption {including risk and risk aversion}
2. Understanding social dynamics
3. Creating enabling environment for systems research

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